Complete Summary

GUIDELINE TITLE

Endometrial cancer of the uterus.

BIBLIOGRAPHIC SOURCE(S)

Hricak H, Akin O, Sala E, Fleischer AC, Bohm-Velez M, Fishman EK, Mendelson E, Thurmond A, Goldstein S, Expert Panel on Women's Imaging. Endometrial cancer of the uterus. [online publication]. Reston (VA): American College of Radiology (ACR); 2005. 6 p. [32 references]

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Hricak H, Mendelson E, Böhm-Vélez M, Bree RL, Finberg H, Fishman EK, Laing F, Sartoris D, Thurmond A, Goldstein S. Endometrial cancer of the uterus. American College of Radiology. ACR Appropriateness Criteria. Radiology 2000 Jun 1;215(Suppl):947-53.

The appropriateness criteria are reviewed annually and updated by the panels as needed, depending on introduction of new and highly significant scientific evidence.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Endometrial cancer of the uterus

GUIDELINE CATEGORY

Evaluation

CLINICAL SPECIALTY

Obstetrics and Gynecology
Oncology
Radiology

INTENDED USERS

Health Plans
Hospitals
Managed Care Organizations
Physicians
Utilization Management

GUIDELINE OBJECTIVE(S)

To evaluate the appropriateness of radiologic examinations for the evaluation of endometrial cancer of the uterus

TARGET POPULATION

Women with endometrial cancer of the uterus

INTERVENTIONS AND PRACTICES CONSIDERED

1. Magnetic resonance imaging
    - Pelvis, with and without contrast
    - Abdomen
    - Uterus, with and without contrast
2. X-ray
    - Chest
    - Kidney, intravenous urography, intravenous pyelogram
    - Colon, barium enema
3. Computed tomography
    - Pelvis
    - Abdomen
4. Ultrasound, uterus
    - Endovaginal
5. Invasive, pelvis, lymphangiography

MAJOR OUTCOMES CONSIDERED

Utility of radiologic examinations in evaluation and staging

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The guideline developer performed literature searches of recent peer-reviewed medical journals, and the major applicable articles were identified and collected.

NUMBER OF SOURCE DOCUMENTS

The total number of source documents identified as the result of the literature search is not known.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Not Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not stated

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

One or two topic leaders within a panel assume the responsibility of developing an evidence table for each clinical condition, based on analysis of the current literature. These tables serve as a basis for developing a narrative specific to each clinical condition.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus (Delphi)

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Since data available from existing scientific studies are usually insufficient for meta-analysis, broad-based consensus techniques are needed for reaching agreement in the formulation of the appropriateness criteria. The American College of Radiology (ACR) Appropriateness Criteria panels use a modified Delphi technique to arrive at consensus. Serial surveys are conducted by distributing questionnaires to consolidate expert opinions within each panel. These questionnaires are distributed to the participants along with the evidence table and narrative as developed by the topic leader(s). Questionnaires are completed by participants in their own professional setting without influence of the other members. Voting is conducted using a scoring system from 1-9, indicating the

least to the most appropriate imaging examination or therapeutic procedure. The survey results are collected, tabulated in anonymous fashion, and redistributed after each round. A maximum of three rounds is conducted and opinions are unified to the highest degree possible. Eighty percent agreement is considered a consensus. This modified Delphi technique enables individual, unbiased expression, is economical, easy to understand, and relatively simple to conduct.

If consensus cannot be reached by the Delphi technique, the panel is convened and group consensus techniques are utilized. The strengths and weaknesses of each test or procedure are discussed and consensus reached whenever possible. If "No consensus" appears in the rating column, reasons for this decision are added to the comment sections.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Criteria developed by the Expert Panels are reviewed by the American College of Radiology (ACR) Committee on Appropriateness.

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

ACR Appropriateness Criteria®

Clinical Condition: Endometrial Cancer of the Uterus

Variant 1: Newly diagnosed endometrial cancer - diagnostic work-up.

Radiologic Exam Procedure	Appropriateness Rating	Comments
MRI, pelvis	8	
MRI, abdomen	4	
X-ray, chest	6	

Radiologic Exam Procedure	Appropriateness Rating	Comments
CT, abdomen	4	
CT, pelvis	4	
US, uterus	4	
X-ray, kidney, intravenous urography, IVP	2	
X-ray, colon, barium enema	2	
INV, pelvis, lymphangiography	2	
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1 = Least appropriate 9 = Most appropriate		

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 2: Assessing the depth of myometrial invasion.

Radiologic Exam Procedure	Appropriateness Rating	Comments
MRI, uterus, with contrast	9	
MRI, uterus, without contrast	6	
CT, pelvis	6	
US, uterus, endovaginal	6	
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1 = Least appropriate 9 = Most appropriate		

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 3: Overall staging.

Radiologic Exam Procedure	Appropriateness Rating	Comments
MRI, pelvis, with contrast	8	Contrast significantly improves evaluation.
MRI, pelvis, without contrast	6	
CT, pelvis	4	
US, uterus, endovaginal	4	
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1 = Least appropriate 9 = Most appropriate		

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 4: Lymph node evaluation.

Radiologic Exam Procedure	Appropriateness Rating	Comments
CT, pelvis	8	Either CT or MRI is appropriate.
MRI, pelvis	8	Either CT or MRI is appropriate.
US, pelvis	2	
Lymphangiography, pelvis	2	
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1 = Least appropriate 9 = Most appropriate		

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Variant 5: Assessing endocervical tumor extent.

Radiologic Exam Procedure	Appropriateness Rating	Comments
MRI, pelvis	8	
CT, pelvis	4	
US, uterus,	4	

Radiologic Exam Procedure	Appropriateness Rating	Comments
endovaginal		
Appropriateness Criteria Scale 1 2 3 4 5 6 7 8 9 1 = Least appropriate 9 = Most appropriate		

Note: Abbreviations used in the tables are listed at the end of the "Major Recommendations" field.

Recommended Imaging Approach

Ultrasound, especially with the use of endovaginal sonography, is sometimes considered to be the primary imaging approach. However, in patients in whom ultrasound is suboptimal or in whom the results of imaging studies will directly influence the choice of therapy and guide in therapy planning, the higher accuracy of contrast-enhanced MR imaging warrants its use. In patients presenting with a large endometrial tumor, MRI should be preferred to CT and should be the primary imaging technique. If cervical involvement is the major clinical concern, MRI is the study of choice. However, there are no outcome studies or cost-effectiveness analyses on imaging evaluation of endometrial cancer. Positron emission tomography is promising in the post-treatment surveillance of endometrial cancer patients. The views expressed in this summary are a combination of literature review and expert opinion.

Conclusion

Patients with endometrial carcinoma should undergo cross-sectional imaging only in cases of clinical staging difficulties, including obese patients, patients with large tumors, poor histologic tumor grade, or possible cervical involvement. If imaging is needed, MRI is the most accurate technique and should be the primary imaging modality.

Abbreviations

- CT, computed tomography
- INV, invasive
- IVP, intravenous pyelogram
- MRI, magnetic resonance imaging
- US, ultrasound

CLINICAL ALGORITHM(S)

Algorithms were not developed from criteria guidelines.

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The recommendations are based on analysis of the current literature and expert panel consensus.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Selection of appropriate radiologic imaging procedures for the evaluation of endometrial cancer of the uterus

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

An American College of Radiology (ACR) Committee on Appropriateness Criteria and its expert panels have developed criteria for determining appropriate imaging examinations for diagnosis and treatment of specified medical condition(s). These criteria are intended to guide radiologists, radiation oncologists, and referring physicians in making decisions regarding radiologic imaging and treatment. Generally, the complexity and severity of a patient's clinical condition should dictate the selection of appropriate imaging procedures or treatments. Only those exams generally used for evaluation of the patient's condition are ranked. Other imaging studies necessary to evaluate other co-existent diseases or other medical consequences of this condition are not considered in this document. The availability of equipment or personnel may influence the selection of appropriate imaging procedures or treatments. Imaging techniques classified as investigational by the U.S. Food and Drug Administration (FDA) have not been considered in developing these criteria; however, study of new equipment and applications should be encouraged. The ultimate decision regarding the appropriateness of any specific radiologic examination or treatment must be made by the referring physician and radiologist in light of all the circumstances presented in an individual examination.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Personal Digital Assistant (PDA) Downloads

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Living with Illness

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2000 (revised 2005)

GUIDELINE DEVELOPER(S)

American College of Radiology - Medical Specialty Society

SOURCE(S) OF FUNDING

The American College of Radiology (ACR) provided the funding and the resources for these ACR Appropriateness Criteria®.

GUIDELINE COMMITTEE

Committee on Appropriateness Criteria, Expert Panel on Women's Imaging

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Panel Members: Hedvig Hricak, MD, PhD (Principal Author); Oguz Akin, MD (Research Author); Evis Sala, MD, PhD (Research Author); Arthur C. Fleischer, MD (Panel Chair); Marcela Böhm-Vélez, MD; Elliot K. Fishman, MD; Ellen Mendelson, MD; Amy Thurmond, MD; Steven Goldstein, MD

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the American College of Radiology (ACR) Web site.

ACR Appropriateness Criteria® Anytime, Anywhere™ (PDA application). Available from the ACR Web site.

Print copies: Available from the American College of Radiology, 1891 Preston White Drive, Reston, VA 20191. Telephone: (703) 648-8900.

AVAILABILITY OF COMPANION DOCUMENTS

The following is available:

- ACR Appropriateness Criteria®. Background and development. Reston (VA): American College of Radiology; 2 p. Electronic copies: Available in Portable Document Format (PDF) from the American College of Radiology (ACR) Web site.

PATIENT RESOURCES

None available

NGC STATUS

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